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ABSTRACT

This collection of abstracts is part of a continuing series providing information on recent doctoral dissertations. The 39 titles deal with a variety of topics, including the following: (1) oral reading behaviors of early readers; (2) the effects of pictures and mode of presentation on the prose comprehension of third and fifth grade children of varying reading abilities; (3) the effects of improved reading of verb and noun inflectional endings on the reading comprehension of learning disabled students; (4) the effect of message structure on inference making in recall; (5) relationships among concrete and abstract concept development, metacognition, and reading comprehension; (6) hierarchical relationships among the components of the reading abilities of beginning readers; (7) the importance of phrasing to reading comprehension; (8) identification, semantic encoding, and text organization in reading comprehension; (9) the effect of free recall of metaphoric processing in a structured text; (10) the effect of information about sentence referents on children's observational learning of a syntactic rule; and (11) reading processes of skilled older adult readers. (HOD)

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A PSYCHOLINGUISTIC ANALYSIS OF SIXTH, EIGHTH, AND TENTH GRADE READERS' PROCESSING OF NATURALLY OCCURRING TEXT METAPHORS

Order No. DA8217493

ALTWERGER, BESS ILENE, ED.D. *The University of Arizona*, 1982. 398pp. Director: Kenneth S. Goodman

This study is a descriptive, psycholinguistic analysis of three sixth-grade high, three eighth-grade average, and three tenth-grade low readers' processing of naturally occurring text metaphors.

Subjects read a 3,667-word self-contained story. The oral reading miscues generated in reading the metaphors were analyzed according to the Goodman Taxonomy of Oral Reading Miscues. The taxonomy analyzes miscues on morphemic, syntactic, and semantic levels. Two additional categories were added to the taxonomy to determine the miscues' effect on the meaning and metaphoricality of the metaphors.

Metaphors in the text were identified according to theoretically based criteria, and categorized on the basis of the Metaphor Feature Matrix.

The primary purposes of the study were to determine how strategies and cuing systems are utilized in reading metaphoric expressions, the relationship between the processing of metaphoric expressions and comprehending of the text, and variations in processing the different kinds of metaphors found in the text. A secondary purpose was to compare the sixth, eighth, and tenth grade readers' processing of the metaphors. Descriptive statistics such as frequencies, means, correlation coefficients, and cross-tabulations were utilized in analyzing the data.

Among the major findings of the study were the following: (1) Metaphorical expressions were processed less successfully than the text as a whole. Metaphor processing involved less successful utilization of semantic and syntactic information, and of correction strategies. (2) Success in processing the text as a whole was positively related to success in processing the metaphoric expressions. (3) Retelling Scores were found to be positively related to no change in the meaning of the metaphors, and retention of metaphoricality with structural changes. (4) Metaphor processing is affected differently by the various kinds of metaphors found in the text. (5) The eighth-grade average readers were more successful processors of metaphors than the younger, more proficient sixth graders and the older, less proficient tenth graders.

Findings of the study indicate a "psychologically real" difference between metaphorical and non-metaphorical language, as well as among various kinds of metaphors. Less successful processing of metaphors indicates that violations inherent in metaphorical language affect the predictive aspect of the reading process.

THE ORAL READING BEHAVIORS OF EARLY READERS

Order No. DA8217823

BARBER, WILFRED CLIFTON, JR., PH.D. *The University of Texas at Austin*, 1982. 119pp. Supervisor: William L. Rutherford

The study investigated the oral reading behaviors of twenty kindergarten children (12 boys and 8 girls) who learned to read before entering school. Although the subjects were reading books prior to kindergarten entry, classroom reading instruction was limited to the teaching of letters and letter sounds, with the exception of one subject who was allowed to read one hour per week. Mean age of the subjects was 6 years 4 months. Miscue analysis revealed that the subjects relied primarily on semantic and syntactic cues to process print. When the written language of the text was easily predictable, the subjects were less concerned with focusing on individual words or letters as they read, as revealed in their strategies of substituting real words (that varied graphically in a number of positions) without altering the meaning of the text, and omitting and inserting words that did not change the meaning of the text. When the subjects encountered text that was more difficult (words that were unfamiliar in addition to story content that was beyond their level of experience) their strategies for word identification changed. The fewer cues the subjects received from context, the more observant they became of individual words and letters in a passage, as revealed by the decrease of real word substitutions, omissions, insertions, and self-corrections. Although the subjects seldom attempted to process unknown words letter-by-letter when contextual clues failed, they would often break unknown words into known word parts. Nonword production, although rare, occurred primarily with unfamiliar words. The nonword substitutions often maintained the same grammatical function as the word in the text. The subjects' miscues and word recognition strategies were compared with the results of a previous study of first grade children who had been taught to read. Two popular theories of reading were discussed. Educational implications along with recommendations for future research were presented.

A STUDY OF THE EFFECT OF PRE-QUESTIONS ON READING COMPREHENSION AND ANXIETY FOR FIRST YEAR NURSING STUDENTS

Order No. DA8220190

BROZO, WILLIAM GEORGE, PH.D. *University of South Carolina*, 1982. 154pp.

Purpose. The intent of the study was to determine the utility of pre-questions for improving reading comprehension of anxious students. The study attempted to answer four broad questions: (1) To what extent are anxiety and reading comprehension related? (2) What effect will pre-questions have on the reading comprehension of high anxious/low ability students? (3) What effect will pre-questions have on the immediate anxiety levels of highly anxious students? (4) To what extent will subjects continue to use pre-questions on their own? (5) What effect will continued use of pre-questions have on the anxiety levels of highly anxious students?

Subjects. The study participants consisted of all first year baccalaureate nursing students at the University of South Carolina.

Method. One-hundred and fifty-one nursing students were tested on the *McGraw-Hill Reading Test* and a reading anxiety scale. Subjects scoring high on reading anxiety and low on reading comprehension were randomly assigned to either one of two treatment groups or a control. Before reading an extended expository prose passage and taking a comprehension test, one treatment group received researcher-designed pre-questions, the other received general-type prequestions, and the control group received no pre-questions. All subjects took a pre- and post measure of state anxiety during the experiment. Two weeks later, data were gathered from the treatments regarding their continued use of pre-questions and reading anxiety.

Results. (1) High reading anxiety was significantly related to low reading comprehension. (2) The researcher-designed pre-questions lowered that treatments state anxiety during the experiment. (3) Pre-questions (regardless of type) did not improve reading comprehension. (4) The more frequently subjects continued to use pre-questions on their own, the lower their reading anxiety. (5) Two weeks after the experiment, the treatment group which received general-type pre-questions reported using them more often on their own than the treatment group which received researcher-designed pre-questions.

Implications of causality and suggestions for educational practice are made in the final chapter.

THE EFFECTS OF PICTURES AND MODE OF PRESENTATION ON THE PROSE COMPREHENSION OF THIRD AND FIFTH GRADE CHILDREN OF VARYING READING ABILITIES

Order No. DA8221475

CHASE, MARTHA LOUISE, PH.D. *The Catholic University of America*, 1982. 217pp.

A literature review suggests that picture superiority effects vary with the mode of presentation (oral versus written), the picture-prose relation presented, the population used as subjects, and the means of testing employed.

The study investigated the effects of picture presentation and mode of presentation on the prose comprehension of third and fifth grade children of varying reading abilities.

The subjects were 96 third and fifth grade children, 48 good readers and 48 poor readers, from seven private schools. Good and poor readers were distinguished by their performance on the SRA achievement test.

The experimental design was a 2 x 2 x 2 x 4 factorial with mode of presentation, grade level, and reading ability as the independent factors, and picture presentation as a repeated factor. The three dependent variables were free recall, verbatim question recall, and paraphrase question recall.

The subjects were randomly assigned by grade level and by reading ability to one of the two mode of presentation levels. All subjects received each picture presentation level with one of four stories: (1) story without pictures, (2) story with pictures, (3) picture before the story (advance organizer), and (4) pictures before the story (preliminary successive). Presentation order of the picture presentation levels and of the stories was counterbalanced.

The following conclusions were supported: (1) Prose learning outcomes depend on the relationship between picture presentation and mode of presentation. For example, when the prose was presented without pictures (no pictures), children learned equally well by listening and by reading. Yet when the prose was presented with pictures (successive pictures), listeners were better able than readers to produce a representation of what was meant (free recall). Readers, however, were better able than listeners to produce explicitly presented propositions (vebatim question recall). (2) Picture superiority effects depend on the relationship between the picture presentation adopted and the performance measure presented. For example, listeners' performance was better at the successive pictures level, relative to the advance organizer picture level, for free recall and paraphrase question recall, but not for verbatim question recall. (3) Prose learning performance varies with reading ability level and with grade level, but only for certain picture presentations, modes of presentation, and performance measures.

THE ALLOTMENT OF COGNITIVE RESOURCES IN READING

Order No. DA8218214

DAVIS, DEBORAH JO, PH.D. *University of Washington*, 1982. 105pp. Chairperson: Patricia A. Nolen

Readers' cognitive processing responses to different difficulty levels in microstructure and macrostructure variables were examined Microstructure sentence components included proposition density, syntactic predictability, and word recognizability. The presence or absence of a title-elicited schema comprised macrostructure components for study.

Subjects were 156 graduate and undergraduate students at the University of Washington. Six passages with ambiguous content were computer presented one sentence at a time. Three of the passages were preceded by a schema-eliciting title, and irrelevant titles accompanied the remaining three. Sentence presentation was student-paced and response latencies were computer recorded for each sentence.

Reading data for all subjects and for subpopulations defined on rate of reading were evaluated by an analysis of variance with repeated measures. Results showed that (1) reading time was significantly reduced when passages were preceded by a schema eliciting title; (2) the presence of a schema title facilitated the rate of reading for slow readers more than fast readers; (3) the presence of a schema-title reduced the amount of cognitive resources allotted to processing propositions; (4) as the number of propositions per sentence increased, there was a greater increase in the reading times for slow readers than for fast readers; (5) syntactically complex sentences were easier to process in the schema present condition than when the schema was absent. However, the effect of syntactic complexity was not independent of word recognizability. Syntactic complexity had a greater influence on reading time when the words were easy to recognize than when they were relatively difficult.

Additionally, multiple regression analyses were performed in replication of Graesser, Hoffman and Clark (1980). When Graesser et 'als'. measures for microstructure variables were employed, their results were replicated. When different measures for word recognizability and syntactic predictability were substituted for those in the Graesser et al. study, a different ordering of the variables was obtained.

A STUDY OF SOME COGNITIVE AND CREATIVE CHARACTERISTICS AND THEIR RELATIONSHIP TO READING COMPREHENSION IN GIFTED AND NON-GIFTED FIFTH GRADERS

Order No. DA8210475

DEVALL, YVONNA L., ED.D. *Temple University*, 1982 122pp. Major Adviser: Dr. S. E. Davis

The purpose of this study was to investigate the possible differences between gifted and non-gifted fifth graders in the areas of cognitive development cognitive style, creativity, and reading comprehension. This investigation was conducted to better understand gifted children and the process of reading comprehension in order to help create more effective instructional programs.

The Written Analogy Reasoning Test (Gallagher &Wright, 1977) and the Proverbs Test (Gorham, 1956) were used to measure cognitive development. Cognitive style was limited to one dimension, field dependence/independence, measured by the Group Embedded Figures Test (Witkin, Oltman, & Raskin, 1971). Two tests from the Wallach-Kogan battery (1965) were used to measure creativity when defined as verbal fluency and uniqueness. Another creativity measure, the Barron-Welsh Art Scale (1949), was used to identify preference for complex and asymmetrical stimuli. Reading comprehension was evaluated with the comprehension subtest from the Iowa Test of Basic Skills (1978). Comprehension skills were designed as literal, interpretive, and evaluative.

Tests were administered to 50 gifted and 50 non-gifted subjects during a four week testing period. Groups were matched for sex, years in school, and chronological age.

It was hypothesized that gifted fifth graders would score higher on the measures of cognitive development, show greater field independence, score higher in creativity as measured by the Barron-Welsh Art Scale, and score higher in reading comprehension, both in total score and separate question type, than non-gifted fifth graders. A further hypothesis stated that there would be no difference between groups in creativity as measured by two tests from the Wallach-Kogan battery.

A multivariate analysis of variance, with the alpha set at .01, was used to test the hypotheses. A significant difference was shown when the Wilks' lambda was used ($F = 19.54$, p .00001). A discriminant function analysis was computed as a follow-up procedure. Inspection of the standardized function coefficients revealed that the Written Analogy Reasoning Test abstract (2nd order) score, the factual questions from the reading comprehension subtest, and the abstract score from the Proverbs Test contributed most to the difference found on the MANOVA. . . . (Author's abstract exceeds stipulated maximum length. Discontinued here with permission of school.) UMI

COGNITIVE STRATEGIES IN THE COMPREHENSION OF TEXTBOOK MATERIAL: AN EXAMINATION OF MIDDLE GRADE STUDENTS

Order No. DA8223776

DORMAN, JAMES WILLIAM, PH.D. *Washington University*, 1982. 148pp. Chairman: Bryce B. Hudgins

The study investigated whether good and poor middle grade reading comprehenders use different cognitive strategies to understand printed passages. Meyer and McConkie (1973) noted college students' superior recall of general text ideas over specific details, while Ausubel (1968) demonstrated the facilitating influence of passage organization. This study tested their findings on younger students, inferring differences in strategies from students' multiple choice comprehension scores on a structured "superordinate" passage and an unstructured "unrelated" passage.

Seventy fifth graders, classified as good or poor comprehenders based on their median Iowa score, read with passages in two different orders (order 1 = superordinate followed by unrelated passage). Their test scores underwent a 2 x 2 x 2 analysis of variance for both comprehension levels, orders, and passages (or kinds of ideas).

Test results supported three hypotheses. First, there was no significant relationship between comprehension ability and recognition of the unrelated passage ideas (order = 2). Second, good comprehenders recognized more of the superordinate than the unrelated passage ideas compared to the poor comprehenders, $F(1,66) = 6.02$, $p < .05$. Third, students recognized more general than specific ideas from the superordinate passage, $F(1,63) = 18.57$, $p < .001$ Also, evidence supported an Ausubelian effect, the facilitating influence of the superordinate passage organization upon the good comprehenders' recognition of the specific details, $X^2(1) = 11.92$, $p < .001$.

The results underlined the significance of both Meyer and McConkie's and Ausubel's theories. Successful comprehenders were influenced both by the kind of ideas (general vs. specific) and also by the passage organization. Good students appeared to benefit from effective organization (or advance organizers) as well as from attention to the general ideas.

The investigator concluded that many poor comprehenders could improve their comprehension by acquiring the strategies used by the good comprehenders. He suggested arranging passage ideas in a more consistent way by order of importance and using such aids as headings, organizers, and explicit instruction.

EFFECTS OF IMPROVED READING OF VERB AND NOUN INFLECTIONAL ENDINGS ON THE READING COMPREHENSION OF LEARNING DISABLED STUDENTS

Order No. DA8227084

EDWARDS, VICKI HINSON, PH.D. *George Peabody College for Teachers of Vanderbilt University*, 1982. 128pp. Major Professor: Richard E. Shores

This study investigated the effects of improved reading of verb tense and noun number inflectional endings on the literal reading comprehension of 10 learning disabled students. Two types of single-subject multiple baseline designs, including a within-subject across behaviors design and an across subjects design were used to demonstrate control over inflectional endings. Students orally read short passages, answered literal recall questions, and received feedback and praise on their comprehension responses daily. The experimental phases included systematic control of one inflectional ending (verb or noun), two inflectional endings (verb and noun), and token reinforcement of comprehension. During the intervention phases, instruction on inflectional endings included a cloze drill and "make sense" instruction, reinforcement of target words during oral reading, and drill to criterion on target words. During the token reinforcement phase, students received tokens exchangeable for back-up items for correct comprehension responses.

The results indicated that improved reading of verb tense and noun number inflectional endings had a positive effect on the comprehension behavior of 8 out of 10 students. Comprehension behavior showed the greatest improvement when both inflectional endings were brought under experimental control. Drill to criterion appeared to be the most effective instructional procedure for training correct discrimination of inflectional endings. Oral reading error rate decreased throughout the study while correct rate remained stable.

Results were discussed in light of psycholinguistic and applied behavior analysis literature and previous research which found that improved reading of verb tense inflections had a significant effect on comprehension. It was concluded that verb tense and noun number inflections appeared to have a relationship to reading comprehension. Research is needed to determine if a significant and consistent relationship exists between morphological inflections and reading comprehension.

THE EFFECTS OF INDUCED IMAGERY AND IMPOSED SYNONYMS UPON PROSE COMPREHENSION

Order No. DA8221480

EVANS, ROBERT ALBERT, PH.D. *The Catholic University of America*, 1982. 155pp.

This study examined the effects of induced imagery and synonyms substituted for difficult words upon reading comprehension. One hundred forty-four subjects were classified as deficit-poor, difference-poor, or average readers. Deficit-poor readers were a year or more below grade level in both reading comprehension and vocabulary. Difference-poor readers were a year below grade level in comprehension but vocabulary skills were on grade level. Average readers were performing on grade level in both comprehension and vocabulary.

Four treatment conditions consisted of reading two short stories accompanied by instruction to: (1) generate visual images following each paragraph in the original stories; (2) read the same stories with synonyms; (3) generate images for stories with synonyms; (4) read the original stories. Following each story subjects answered a 14 item test of the story content, which served as the dependent measure.

Data from the 4(conditions) x 3(reader classifications) x 2(sex) randomized blocks design with two repeated measures were analyzed with a analysis of variance technique for repeated measures. The results from this analysis showed that instructions to generate visual images after reading unaltered (no synonyms) stories increased reading comprehension more for difference-poor than for deficit-poor readers. Performance equal to the difference-poor using imagery alone, however, was observed for deficit-poor readers given instructions to generate visual images after reading stories with synonyms substituted for difficult words. These increases resulted in performance comparable to a control group of average readers given neutral instructions with the original stories. With relatively easy stories, substituting synonyms for difficult words in the absence of imagery instructions increased deficit-poor readers' comprehension in comparison to comparable subjects receiving neutral instructions and unaltered stories. Increases, independent of story difficulty, in difference-poor readers' performance was also observed with synonyms in comparison to a control condition. Difference-poor readers significantly increased comprehension when instructed to use visual imagery with unaltered stories in comparison to a comparable reader group given neutral instructions with the same stories. Instructions to image, however, after reading unaltered stories, did not result in increased performance for average readers when compared to similar readers receiving neutral instructions.

THE EFFECT OF MESSAGE STRUCTURE ON INFERENCE MAKING IN RECALL

Order No. DA8224193

FINCH, MARGARET ERIN, PH.D. *The University of Oklahoma*, 1982. 103pp. Major Professor: L. Blaine Goss

This study attempted to determine the effect of manipulating the structure of a story on the production of inferences in recall. One independent variable, story structure, was manipulated four times. Each manipulation was administered to one of four groups composed of Communication 1113 students. After the presentation of the stimulus material, a question packet was administered to each student. The questionnaire tapped the three dependent variables: recall of cause, recall of consequence, and recall of congruency. In addition, the instrument also tapped the subjects' confidence in the accuracy of their answers. Analysis of the results revealed that when a story node is deleted or made incongruent, the subjects will produce inferences in recalling the manipulated node. The results also revealed that the manipulation of the cause node has a greater effect on recall than the manipulation of the consequence node. Testing of the confidence scores revealed that subjects were not aware of making congruency inferences but were aware of making consequence inferences.

EFFECTS OF DIFFERENT TYPES OF WRITTEN DISCOURSE ON RECALL BY GOOD AND POOR READERS IN GRADES 2, 4, AND 6

Order No. DA8220923

FREEDBERG, JUDITH W., ED.D. *Boston University School of Education*, 1982. 187pp. Major Professor: James Flood

The purpose of this study was to learn about the discourse processing abilities of children, differing in age and reading ability, by investigating their ability to recall different types of discourse. Good and poor readers from grades 2, 4, and 6 read and recalled three passages, each with a different organizational structure. These passages represented discourse with a narrative structure, a topical structure, and a temporal structure.

The subjects' free recalls were scored by comparing them to the pre-established units for each passage based on a procedure used by Johnson (1970) and Brown and Smiley (1977). Free recalls were scored to indicate the total percentage of units recalled and the percentage of units recalled at each level of structural importance. Subjects' correct answers to probe questions relevant to each passage were also scored. Analyses of variance and Newman-Keuls tests were the statistical procedures used on the data.

The results indicated that for all groups recall of the narrative discourse was significantly greater than recall of both the topical and temporal discourse. For the good readers, temporal discourse produced greater free recall than topical discourse, while poor readers had equal difficulty in recalling information from the topical and temporal types of discourse. Subjects at all grade levels remembered significantly more of the important ideas than the unimportant ideas for the narrative discourse. However, only sixth graders showed significant differences in their retention of important versus unimportant information with topical and temporal discourse.

The differential effects on recall produced by the different types of discourse suggest that the structure of a text influences recall. However, the differential effects of discourse type on recall vary with reading ability. The results also suggest that the ability to extract important information from a text, as opposed to unimportant information, is not a general processing skill, but varies with the knowledge readers have about the structure of a given text type.

A DEVELOPMENTAL STUDY IN INFERENTIAL TEXT COMPREHENSION AND MEMORY: THE EFFECTS OF PRE-POSED QUESTION STRATEGIES ON INFORMATION ELABORATION

Order No. DA8208302

GONCHAR, ARTHUR JAY, PH.D. *The University of Wisconsin - Madison*, 1981. 256pp. Supervisor: Professor Steven R. Yussen

This study investigates the inferential processes involved in children's understanding of simple stories. A preliminary model is proposed, based on an extensive review of the literature on research in text comprehension. It suggests that recall and comprehension of information contained in text is a function of an inference processing mechanism, which seeks to elaborate missing information as a means of organizing and integrating text structural elements with previously existing knowledge systems. It is assumed that at the heart of this inferential mechanism is a judgment procedure which evaluates inferential possibilities for their importance to overall text understanding. The research presented in this paper sought to determine (1) if elementary school children could differentiate between important (causal) inferences necessary for comprehension and unimportant (informational) inferences irrelevant to comprehension, and (2) whether prereading instructional strategies could effect inferential judgment, comprehension performance, and subsequent story recall.

In this study, three groups of third and sixth grade students were asked to listen to and read story information prefaced by instructions containing either story-general questions or story-specific questions, or no questions at all. As anticipated, the results revealed significant grade level effects on all dependent measures. Sixth graders recalled more story elements, produced a greater number of story elaborations, judged inferential possibilities more accurately, and responded correctly more often to inference probe questions than third graders. The results also indicated a powerful influence of prereading instructions on the judgment of importance of inferential possibilities and on the type of inferential elaborations made during recall. When taken together, the general finding of this study indicates that children as young as eight years of age are able to differentiate between inferential possibilities and that this ability develops further over the elementary school years. It also appears that this ability is influenced by the readers' goals established in pre-reading instructions. Several suggestions for improving the instruction of reading and the readability of text for children are made, based on the implications of the present research findings.

THE DEVELOPMENT OF THE USE AND COMPREHENSION OF METAPHOR BY 'PRE-SCHOOL' CHILDREN

Order No. DA8219114

HARRIS, PATRICIA GREEN, PH.D. *Texas A&M University*, 1982. 310pp. Chairmen: Dr. Helmut Esau (deceased), Dr. David H. Stewart

The purpose of this study is to investigate the child's use of metaphor, a topic not yet been pursued by linguists concerned with the acquisition of language. The first section of this study is a historical sketch of metaphor from Aristotle to modern theorists. The next two chapters discuss the inherent importance of metaphor in artistic and in non-artistic thought. The fifth chapter presents studies of the child's comprehension of metaphor, while the sixth chapter presents data collected from children and from printed sources demonstrating the child's use of metaphor. The seventh chapter analyzes the data presented in the sixth chapter, and the eighth chapter presents the implications of the study, particularly in the education of young children. The argument of this dissertation is that young children who are capable of symbolic manipulation are also capable of metaphoric production and metaphoric comprehension if the metaphor relates to the realm of the child's experience. The findings of the research reveals that spontaneous metaphor, those noting similarity between disparate objects, emerge first in the child, followed by the emergence of simile. After the simile emerges, the more deliberate, proportional metaphor emerges.

The methodology is standard in the field of psycholinguistics and child acquisition of language. There is a theoretical basis presented, Chapters III, IV, and V, in which the topic is surveyed in the existing scholarship and the pertinent topics, namely intentionality and comprehension, are discussed. Next, a report of the collected data, in this case drawn primarily from two subjects in detail, plus a control group of fourteen subjects as well as printed data from already published sources is presented, the models being E. V. Clark, Ann Peters, and Roger Brown, who have all published discussions of child language based on no more than three subjects. The analysis of the data argues for the existence and describes the emergence of the metaphor in the pre-school child.

A STUDY OF THE DIFFERENCES IN ORAL READING BEHAVIOR BETWEEN ABLE AND DISABLED READERS

Order No. DA8213029

HARRISON, MARGARET DRUMM, ED.D. *Oklahoma State University*, 1981. 80pp.

Scope and Method of Study. This study examined the differences in oral reading behavior between able and disabled readers. Comparisons were made on passages ranging from 2.5 to 4.0 between five oral reading error types (substitution, mispronunciation, words aided after five seconds, omission, and insertion) and ten parts of speech (proper noun, noun, pronoun, verb, adverb, adjective, conjunction, article, preposition, and interjection) for able and disabled readers at both instructional and frustration levels.

After screening second, third, fourth and fifth grade students at the OSU Reading Clinic and elementary students in Stillwater, Oklahoma and the surrounding area a final sample of 20 able and 20 disabled readers was chosen. All readers evidenced an instructional reading level between 2.5 and 3.9 on the *Standard Reading Inventory*. Errors made on extended passages (500 words) from the *Stories of Stuever (Revised)* were the basis for the analysis.

Findings and Conclusions. Although some significant values were evidenced at the .05 level, no differences were found to be consistent across passages. At the instructional level disabled readers made significantly more errors on Proper Noun/Substitutions on the 2.5 passage and Article/Insertions on the 3.0 passage. Able readers made significantly more errors than disabled on Verb/Substitutions on the 3.5 passage. At the frustration level disabled readers made significantly more errors than able readers on Noun/Substitutions on the 3.5 passage. At the frustration level disabled readers made significantly more errors than able readers on Noun/Substitutions and Preposition/Substitutions on Passage 3.0 and Conjunction/Omissions on Passage 3.5. Able readers made significantly more errors than disabled readers on Noun/Words Aided on Passage 3.0. In terms of the broader questions of the study, the differences in error patterns of able and disabled readers appear to be minimal, reinforcing studies that seem to indicate that reading is a developmental process. The findings of this study may indicate that little difference exists in skills exhibited by readers common to a reading level, regardless of chronological age.

A DEVELOPMENTAL INVESTIGATION OF RELATIONSHIPS AMONG CONCRETE AND ABSTRACT CONCEPT DEVELOPMENT, METACOGNITION, AND READING COMPREHENSION

Order No. DA8226468

HAYNES, JACQUELINE ABEL, PH.D. *University of Maryland*, 1982. 230pp. Supervisor: Dr. Ruth Garner

This investigation concerns relationships among concrete and abstract concept development, metacognitive awareness of concrete-abstract concept differences, and comprehension of concrete and abstract text, at four age levels. The relationships among factors, unexplored in prior research, may help to explain student performance on abstract-topic tasks in school.

While prior research has focused on concrete concept development, it has excluded linguistically abstract concepts for methodological reasons. This study, measuring concept development through noun definition, focuses on abstract and concrete concepts.

Recent research demonstrates the importance of metacognition in many cognitive processes. The ability to monitor the abstractness of incoming information and select or create appropriate schemata may be related to concept development level and to successful reading comprehension. This study augments prior research in concept development, metacognition and comprehension, and tests hypotheses concerning the relationships among them.

Three tasks were administered individually to 24 subjects at each of the four age levels, in counterbalanced order. Concrete and abstract concept development were measured by noun definition and subsequent ratings of definitions. Metacognition was assessed through a seven-step sequence of probes designed to elicit a response indicating awareness of concrete-abstract noun differences. Comprehension was assessed through answers to multiple-choice questions based on a pair of grade-appropriate concrete and abstract passages.

One way ANOVA's were used to test concrete-abstract concept differences and age differences on definition and metacognitive tasks. Correlation procedures were used to measure relationships among age and scores on the tasks.

Results show consistent trends for concrete and abstract concept development, with abstract concepts developing later and a dramatic increase in metacognition developing between fourth and sixth grades. Correlational data are inconsistent for concrete concepts and comprehension. Moderate positive correlations, ($p < .01$) are consistent among abstract concept development, metacognition and abstract comprehension, even when other variables are controlled.

The investigator concludes that metacognitive awareness of concrete-abstract differences plays an important role in comprehension of abstract text. This relationship has implications for comprehension instruction and for school curriculum requiring comprehension of abstract concepts.

THE EFFECTS OF PICTORIAL AND VERBAL ELABORATION ON MNEMONICALLY-RECALLED SERIAL INFORMATION

Order No. DA8219174

HOFFMAN, JOHN STANLEY, PH.D. *Brigham Young University*, 1982. 163pp. Chairman: Paul F. Merrill

This study investigated the effects of verbal and/or pictorial elaboration on recall of information learned using the story mnemonic technique. Four conditions were formed by crossing two independent variables (verbal and pictorial elaboration): the pictorial-verbal group received stories which were verbally and pictorially elaborated; the pictorial group received stories which were pictorially elaborated but not verbally elaborated; the verbal group received verbally elaborated stories but no pictorial elaboration; and the control group received stories with no verbal or pictorial elaboration.

Eighty-two subjects were trained and then exposed to 23 three-or-four item lists for one or one-and-a-half minutes, respectively. Retention was measured immediately and then again after an eight day delay. An analysis of variance showed no significant effects ($\alpha < .05$) for verbal or pictorial elaboration nor any significant interaction effects.

THE LIMITATIONS OF CONTRASTED RHETORICAL PREDICATES ON READER RECALL OF EXPOSITORY ENGLISH PROSE

Order No. DA8221289

HOROWITZ, ROSALIND, PH.D. *University of Minnesota*, 1982. 236pp.

The effects of four higher-order rhetorical predicates on reader recall of scientific-expository English prose were investigated. Rhetorical predicates were attribution (a list-type structure), adversative (comparison-contrast), covariance (cause-effect) and response (problem-solution) patterns, and a no higher-order rhetorical predicate (control condition). Although some of these structures have been studied in scattered samples of languages of the world, few empirical studies have examined the role of these structures in written English prose. This study was designed to (a) test claims in the theoretical literature that the adversative (a hypotactic pattern) was the most efficient structure in discourse comprehension and recall and (b) to determine whether or not findings reported by Meyer and Freedle (1979) on the four rhetorical predicates, using a listening mode, would be replicated using a reading mode. Subjects were 9th graders (in English classes) and 13th graders (in university freshmen composition classes). They read and recalled one of ten passages that varied by rhetorical predicate and topic.

In this study, no main effect for rhetorical predicate was found. A significant interaction between passage and rhetorical predicate indicated that some higher-order rhetorical predicates are better suited to some texts. Selected analyses revealed adversative, covariance, and response structures were significantly more effective in facilitating recall than the control condition and the attribution structure, but only for one text. These findings indicate that the effects of rhetorical predicates are not uniform across texts. Rather, the effects of rhetorical predicates may vary by passage topic and content, reader, and modality.

This study demonstrated that rhetorical predicates in short, well organized, scientific passages may be simply surface reflections of overall conceptual integration, without any independent function. For skilled, upper-grade readers, they may not always be essential for the integration of content. Previous research examining the rhetorical predicates did not include a control condition; thus, the actual need for such structures had not previously been tested.

In sum, (a) claims for the superior efficacy of particular of these patterns remains questionable and premature; (b) evidence points to certain limitations of rhetorical predicates as predictors of text recall.

EFFECTS OF GRADE LEVEL AND TASK TYPE ON COMPREHENDING EXPLICIT, IMPLICIT AND METAPHORICAL INFORMATION IN WRITTEN TEXT

Order No. DA8223605

KINCADE, KAY M., PH.D. *Fordham University*, 1982. 438pp. Mentor: Lillian C. R. Restaino-Baumann

Children's reading comprehension was investigated to determine the effects of grade level, as defined by specific age ranges, and recall task types on their recall of Explicit, Implicit and Metaphorical information. Ten sentence prose passages were constructed to control for passage content, metaphor construction, passage length, number of propositions and sentence length, syntactic complexity count and word frequency count. After reading four prose passages, 40 second and 40 fifth grade subjects from a suburban school system ($N = 80$) were assessed on either a cued or free recall task. Their comprehension was evaluated on the quantity of Explicit, Implicit and Metaphorical propositional units they were able to recover from the original texts under the two recall conditions, cued and free, and at the two grade levels, second (age range 7.5 to 8.5) and fifth (age range 10.2 to 11.2). An analysis of the protocols rendered three qualitative recall scores, EXPLICIT, IMPLICIT and METAPHOR scores, and a total quantitative score produced by summing all scores, Total Recall score.

A series of two-way analysis of variances produced significant main effects for grade level and task type on each of the four dependent variables, EXPLICIT, IMPLICIT, METAPHOR and Total Recall scores, but no significant interactions were found. The fifth grade subjects consistently recalled more propositional units than the second graders in all categories, and the cued recall condition consistently produced greater propositional recall for both grade levels than did the free recall condition in which they had to provide their own retrieval cues and strategies. In other words, both grade levels benefited significantly from the provision of external retrieval cues in the form of structured probe questions.

The results clearly demonstrate the ability of second graders' to complete abstract metaphorical and inferential reasoning when the task is appropriately structured for their specific level of cognitive development. While young children do experience difficulty in expressing their thoughts and in retrieving the appropriate information on their own (free recall), they can effectively utilize external memory retrieval cues. In fact, appropriate retrieval cues were essential for consistent expression of metaphorical understanding.

HIERARCHICAL RELATIONSHIPS AMONG COMPONENTS OF READING ABILITIES OF BEGINNING READERS

Order No. DA8216442

KNIGHT, CATHARINE CURRIE, PH.D. *Arizona State University*, 1982. 206pp.

This study examined hierarchical relationships among three developmental components of reading ability: (a) semantic skills, (b) phonological skills, and (c) visual graphic skills. Hierarchical relationships among the skills were examined to characterize and compare the acquisition of reading skills in normal and below grade level beginning readers. In addition, a developmental schema of word reading skills was presented as one way to conceptualize the acquisition, differentiation and integration of beginning reading skills. The schema is characterized by a hierarchical ordering of basic reading skills reflecting semantic, phonological, and visual graphic component abilities. The development, change, differentiation, and integration of skills is described in terms of skill theory, a conceptualization describing the development of cognitive hierarchical synchronies. One hundred twenty first-, second-, and third-grade children were tested. Of these, 30 children (approximately 10 from each grade) were identified as below grade level readers. Children were individually tested on seven tasks for each of 16 word items. Word items ranged in difficulty from preprimer to late third-grade levels. The tasks tested were: Verbal definition, picture identification, letter naming, aural rhyming (recognition), oral rhyming (production), reading recognition, and oral reading of words.

Results indicated that children's performance on tasks was hierarchically ordered. For the tasks tested, the most basic levels of the hierarchy (and hence, prerequisite to more advanced tasks) included semantic skills, evidenced by producing verbal definitions and matching spoken words to pictures. Such semantic skills were found to be a precondition for identification of individual letters, and recognition of phonological (i.e., rhyming) and visual graphic (letter) groups. Ultimately, all these skills were apparently successfully encompassed in capacities to rhyme and read orally. The hierarchical relationships between and among skills varied across reading levels, stimulus items (words) and subjects. Different skills relationships were found for different items even within the same child. Even so, within the limits of the study, the data were generally supportive of an overall hierarchical ordering of skills, with definitional tasks most basic and oral reading most advanced. These findings were consistent with the developmental schema presented.

THE RELATION OF PAUSING ABILITY AND TYPOGRAPHICAL CONDITIONS TO READING COMPREHENSION

Order No. DA8226775

LEQUERICA DURAND, MARTHA, PH.D. *New York University*, 1982. 140pp. Chairperson: Professor Lisa Fleisher

The purpose of this investigation was twofold. First, it aimed to study the work grouping abilities of Difference readers, that is, readers with adequate decoding skills but poor comprehension abilities. The second and more practical purpose referred to the effects of typographically arranged text on the comprehension scores of the same group of readers. Participants were 171 seventh graders from seven junior high schools in Brooklyn, New York, who were homogeneous in regard to socio-linguistic criteria and decoding accuracy but varied in their comprehension performance.

In order to address the first purpose, the ability to group words was measured by having the students mark their own pauses when reading (pausing ability measure). Pausing ability scores were then related to pretest reading comprehension as measured by the recall of main ideas of a Japanese folk story. A low but significant correlation at .05 level between these two measures was found. Supplementary analyses of the relation between grammatical pausing ability and the reading measures used in the study suggested that there might be a differential role of punctuation in comprehension of narrative versus expository prose at the seventh-grade level.

The second purpose of the study was tested by using a multiple hierarchical regression to analyze the relation among the pausing ability scores, pretest reading comprehension, and typographical condition (standard or meaningfully grouped text) on the recall of main ideas. Subsequently, a similar analysis covarying pausing ability scores was carried out to determine if typographically grouped text would produce the same positive effect on reading comprehension reported by previous studies. The results of these tests were nonsignificant. The inconsistency of these findings with previous research is discussed in relation to differences in the methodologies used.

The results of this study indicated further testing of the word group abilities of Difference readers is needed. In addition, research on the effect of typographically grouped text on comprehension should aim to reconcile the differences in findings between this study and previous investigations.

COMPREHENSION OF THE DIRECTIVE PRAGMATIC STRUCTURE IN ORAL AND WRITTEN DISCOURSE BY CHILDREN AGES SIX TO ELEVEN

Order No. DA8212014

LIEBLING, CHERYL RAPPAPORT, PH.D. *University of California, Berkeley*, 1981. 244pp.

This study reports findings on the ability of first, third, and fifth grade children to comprehend the directive pragmatic structure embedded within spoken and written narratives. Three levels of pragmatic competence--reciprocity, reflexivity, and reasoning--were identified. The study examined two major areas: First, the development of alternative discourse processing strategies which elementary school age children utilize in responding to and recognizing appropriate language usage in social context; and second, the influence which discourse mode, spoken or written, has on effective utilization of alternative processing strategies in discourse comprehension.

Sixty children, twenty from each of grades one, three, and five and between the ages of six and eleven, were asked to listen to a set of six stories presented orally with accompanying pictures and read a set of six stories presented without pictures. Each story contained a directive assigned to one of three categories varying in degree of explicitness. Following the presentation of each story, questions related to the pragmatic competence levels were posed.

Strong support for the theoretical existence of three pragmatic competence levels was found. On Level I, reciprocity, children in all grade levels were equally capable of responding to and identifying directive intent across directive categories within the spoken discourse format. On the written discourse presentation, however, children in grade five were significantly more able than children in grade one ($t_{Dunn} = -4.81$, $p \leq .05$, $CI -4.95 \pm 2.55$) and grade three ($t_{Dunn} = -2.91$ p. $\leq .05$, $CI -3 \pm 2.55$) in responding to and recognizing directive intent across directive categories. First and third graders, thus, were not as sensitive as fifth graders to the ways an author conveys meaning primarily through language choices in written discourse.

On Level 2, reflexivity, children in grades three and five performed significantly better than children in grade one across directive categories and discourse modes (1 vs 3: $t_{Dunn} = -8.31$, $p \leq .05$, CI -13.55 ± 4.04; 1 vs 5; $t_{Dunn} = -10.37$, $p \leq .05$, CI -16.9 ± 4.04). Children in grades three and five were more sensitive than grade one children to the range of directive paraphrases available to speakers or writers representing their points of view in language choice, regardless of discourse modality or directive explicitness. . . . (Author's abstract exceeds stipulated maximum length. Discontinued here with permission of author.) UMI

IDENTIFICATION, SEMANTIC ENCODING, AND TEXT ORGANIZATION IN READING COMPREHENSION

LOGAN, RUBY EILLEEN, PH.D. *University of Southern California*, 1982. Chairman: Professor Robert L. Baker

Problem. Wiener and Cromer (1967) have developed a difference model to describe readers whose passage comprehension is poor even though they possess adequate vocabulary and word identification skills. While text manipulation strategies have frequently been successful in improving the comprehension of difference readers at the high school and college levels, the effects of such techniques during the period when students are acquiring reading skills have not been systematically studied. Conceptualized within the Wiener and Cromer model, this investigation was concerned with the effectiveness of passive practice with preorganized text and instruction in perception of phrase boundaries on the reading comprehension of young difference readers.

Method. An Experimenal Group-Control Group design utilized 88 fourth grade students functioning at or above the fiftieth percentile in vocabulary and word identification skills. They were designated as good or difference readers differentiated by reading comprehension scores at or above the sixtieth percentile (good readers) or at or below the thirtieth percentile (difference readers). After training with reading material using (1) regular paragraph format, (2) text organized with one phrase per line, or (3) instruction in perception of phrase boundaries, students were administered a reading comprehension test. Data were subjected to analysis of variance.

Conclusions. (1) The comprehension of difference readers exposed to preorganized text and those instructed in perception of phrase boundaries was not shown to differ significantly from that of a control group of difference readers, and (2) good and difference readers trained under passive practice and instruction conditions were not shown to differ in their performance on a standardized measure of reading comprehension.

Recommendations. (1) A modified replication of this study should be undertaken which would include an oral reading pretest to identify students deficient in text organization strategies, (2) future research should include use of a clinical approach with a very limited sample to validate the difference model for young readers, and (3) other text organization strategies based on constructs derived from different theoretical positions should be developed for implementation with young, difference readers.

THE EFFECTS OF SELECTED VARIABLES ON MISCUE PATTERNS OF ADULT READERS Order No. DA8219121

LONGNION, BONNIE OWNBY, PH.D. *Texas A&M University*, 1982. 292pp. Chairman: Dr. William H. Rupley

This investigation was structured to examine the reading strategies of adult readers and to examine the many possible sources of variance for producing miscues. This study investigated the reading strategies of three groups of adult readers: 20 Adult Basic Education students, 20 high-risk college freshmen, and 18 college senior Education majors.

Data were collected from three separate activities: information obtained from an interview, performance on the *Lorge-Thorndike Intelligence Test*, and oral reading performance on an informal reading inventory. The *Reading Miscue Inventory* (RMI) was used to analyze miscue patterns. Fourteen predictor variables were examined in this investigation: (1) text length, (2) interest, (3) familiarity with the style, (4) familiarity with the content, (5) bilingualism, (6) level of reading maturity, (7) non-verbal intelligence, (8) verbal intelligence, (9) conceptualization of reading, (10) group membership, (11) age, (12) number of years since subject had enrolled in a formal educational setting, (13) time spent reading weekly, and (14) readability.

Nine criterion measures were used in this study: (1) graphophonic acceptability of miscues, (2) syntactic acceptability of miscues, (3) semantic acceptability of miscues, (4) percentage of corrected miscues, (5) percentage of miscues resulting in serious meaning loss, and (6) percentage of miscues corrected that had earlier resulted in a loss of meaning. Performance on the questions following the reading of each selection yielded three other criterion measures: literal comprehension, inferential comprehension, and critical comprehension. Several analyses were used to explore the relationship between the predictor variables and the criterion variables. All fourteen predictor variables were used in the nine regression models created. Stepwise regression analysis was used to rank order the predictor variables' importance to each model.

Results of this study supported many of the findings of miscue analysis research, that studied children's reading behavior. Miscues varied as a function of a combination of many factors. Readability of a selection to a specific reader provided the most variance in the production of miscues. This study supported the notion that miscues were influenced by the interaction of text and reader variables. Miscues also varied across text. Readers tended to rely more heavily on the context of the selection to provide meaning as they progressed through the text.

READING PROCESSES OF SKILLED OLDER ADULT READERS

MACLEAN, MARGARET LOUISE, PH.D. *McGill University (Canada)*, 1982.

An iterative case-study approach was used in this investigation of reading processes used by mature experienced readers. Six retired schoolteachers (aged 55 plus) were interviewed to obtain comprehensive data on their reading interests, attitudes, and life long reading habits. A combination of modified cloze and guided introspection procedures were used to examine the reading behaviours exhibited across multiple and varied texts.

Scoring procedures were developed which considered sentence, partial text, and whole text level acceptability of modified cloze responses. As well, a framework which considered whether responses were mainly text-based or knowledge-based was developed for analyzing the guided introspection data.

Results indicated that although attitudes towards reading were constant across total lifespan, reasons for reading and reading interests changed. Differences in processes used to comprehend text were apparent across both subjects and texts. Subjects exhibited similar sentence and partial text scores, but whole text level scores differed. Guided introspection protocols indicated mainly interactive response processing rather than either text-based or knowledge-based processing. Mode of processing changed across texts depending on reader interest in text topics.

Results indicated the value of the iterative case-study design for obtaining intensive data on reading processes. As well, the procedures developed for collecting and analyzing data were useful for examining how readers construct and reconstruct meaning as they read.

THE EFFECT OF REFUTATION STRUCTURE TEXTS ON THE READING COMPREHENSION OF MIDDLE GRADE POOR COMPREHENDERS Order No. DA8222442

MARIA, KATHERINE, PH.D. *Columbia University*, 1982. 192pp.

This study investigated several questions regarding the comprehension of Refutation structure texts. Refutation structures found commonly in middle grade reading material are texts in which the author refutes a misconception he or she assumes is held by the reader.

Three different versions of Refutation texts were used in the study. R1 and R2 texts both made direct reference to a misconception with R1 texts stating the misconception before the refutation and R2 texts reversing this order. R3 texts contained new information that refuted a misconception but made no direct reference to it. R1 texts existed in two conditions: (1) the reader had the misconception refuted by the text (Condition HM); (2) the reader did not have the misconception (Condition NHM). The study investigated the effects on comprehension of these two conditions and the different types of refutation structures. It also investigated the relationship between comprehension and the use of linguistic cue words.

There were 25 fifth- and sixth-grade subjects identified as poor comprehenders by a test and discussion with their teachers. These subjects were known to have misconceptions based on their responses to Yes-No questions from a previously administered questionnaire. Each student read 24 texts: 6 R1 (Condition HM), 6 R1 (Condition NHM), 6 R2 and 6 R3.

The texts were read aloud by the subjects. After reading each text, the child was asked for an oral recall. He or she was then asked the Yes-No question from the questionnaire that had been the basis of the construction of the text. He or she was also asked to support the answer with information from the story.

The children made little use of linguistic cue words in the recalls, often including both the misconception and the new information without any indication that they recognized the contrast. Recalls did not differ across the text types, but answers to the questions did. However, information from the question interacted with prior knowledge and information from the text to affect comprehension.

COGNITIVE PROCESSES IN CHILDREN'S TEXTUAL INFERENCES

Order No. DA8218921

MICHELS, MARIANN ELIZABETH, D.ED. *The Pennsylvania State University*, 1982. 209pp. Adviser: Francis J. DiVesta

This study investigated children's textual inferences. Readers from grades 3 and 6 made conceptual and transitive inferences from text. Conceptual inference problems, each solved by the identification of a concept, and transitive inference problems, each solved by the determination of a linear relationship among terms, were individually embedded in textual passages. The passages varied according to the (a) presence or absence of statements irrelevant to the inference and (b) sequence of statements relevant and statements irrelevant to the inference. Following each passage inference tests which required readers to either generate the inference spontaneously or to evaluate alternative inferences (inferential cues) were administered.

The findings indicated that age-related improvement was greater for conceptual inferences than it was for transitive inferences. Readers made conceptual inferences faster than transitive inferences when they were given inferential cues. Extratextual knowledge presumed to be fundamental to conceptual inferences but minimally involved in transitive inferences was theorized to account for these effects.

Readers made more textual inferences with inferential cues than without them. Inferential cues facilitated inferences to a greater extent in younger readers than in older readers. These findings suggested that older readers were more apt to demonstrate their inferential competence than younger readers.

Irrelevant information hindered inference construction when all irrelevant statements preceded all relevant statements and when irrelevant statements were alternated with relevant statements in text. Inferences were made from passages of only relevant statements and passages in which all relevant statements preceded all irrelevant statements with comparable ease. Thus, readers were less distracted by irrelevant information in text when it was encountered after all relevant statements were read. The sequence of statements relevant and statements irrelevant to the inference did not affect inference construction. The extent to which these findings may have reflected selective attention to relevant information was discussed.

In summary, the evidence from this research indicated that the age of the reader, implied text content, inference test methods, and text characteristics affect textual inferences. Further studies on this topic were outlined.

A PSYCHOLINGUISTIC ANALYSIS OF EARLY READING ACQUISITION. SIX CASE STUDIES

Order No. DA8218298

MINO-GARCES, FERNANDO, PH.D. *Georgetown University*, 1981. 189pp.

This dissertation proposes two hypotheses. The first hypothesis states that reading acquisition is, like language acquisition, a matter of symbolic thinking, and that reading acquisition can and should be accomplished at the same time, and at the same age, as language acquisition. The second hypothesis is that Early Reading does not conflict with Piaget's stages of cognitive development, but is congruent with them.

To test the hypotheses to the extent that the case study approach can test hypotheses, six case studies of early readers are presented. The data gathered from the six case studies is analyzed psycholinguistically. The six cases, besides supporting the hypotheses, provide a data-based interpretation of Early Reading.

Early Reading is a complex developmental process which involves not only reading, but also cognitive development, perceptual development, and language acquisition. Thus this dissertation reviews not only Piaget's theory of cognitive development, but also theories of perceptual development and language acquisition. Early Reading and teaching Early Reading are defined. The two methods used to teach Early Reading to the subjects are presented, the Lado method and the Montessori method. An explanation of the *Preschool Language Scale* (Zimmerman, Steiner, and Evatt 1969) which was used for the subjects' language analysis, is also presented.

Chapter I presents an introduction to the study. Chapter II contains a review of the related literature. Chapter III gives information about the subjects and presents the data gathered from the six case studies.

Chapter IV is the core of the dissertation, where the data is psycholinguistically analyzed, taking into consideration the theories presented in Chapter II. The hypotheses are proposed, discussed, and tested.

Chapter V presents a summary and the conclusions of the study. Further investigation is encouraged and recommendations for it are given.

THE EFFECT OF INFORMATION ABOUT SENTENCE REFERENTS ON CHILDREN'S OBSERVATIONAL LEARNING OF A SYNTACTIC RULE

Order No. DA8222967

MORGULAS, SUSAN SPIES, PH.D. *City University of New York*, 1982. 106pp. Adviser: Professor Barry J. Zimmerman

The present research focused on examining the effectiveness of verbal modeling in promoting comprehension of a syntactic rule. The primary purpose of the study was to test the hypothesis that receiving information about the content of modeled passive sentences helps children to understand the meaning of those sentences and to induce the syntactic rule governing them. The second purpose was to replicate Brown's (1976) finding that modeling supplemented with concrete enactive referents leads to syntactic rule learning.

Nursery school children were pretested for comprehension of reversible passives. Children failing to demonstrate comprehension skill were randomly assigned to one of four experimental conditions or to a no-modeling control condition. Children in the experimental conditions received modeling treatment. They heard passive sentences embedded in a novel story which contained no extra-syntactic clues to sentence meaning.

Before modeling, children in the relevant information conditions listened to descriptions of the dispositions and probable behavior of the grammatical agents and objects of the modeled sentences. Youngsters in the irrelevant information conditions heard information about the story characters but irrelevant to the actions described by the model. Modeling with enactment subjects watched the model use toys to demonstrate the actions named in the modeled sentences. The presence or absence of enactment was factorially varied with the two types of prior information. One posttest assessed children's understanding of the story sentences. Two additional posttests measured transfer of learning.

The data were analyzed in a multivariate analysis of covariance with pretest score as the covariate. A series of comparisons between children in the modeling conditions and the no-modeling controls was also made. The pattern of results leads to the conclusion that the combination of prior relevant information and enactment, and not either variable alone, constituted the crucial factor in syntactic rule learning. The results are discussed in terms both of the subprocesses held by social learning theory to be activated during learning by observation and of the social learning research on language skills. Implications for education are also discussed.

THE IMPORTANCE OF PHRASING TO READING COMPREHENSION

Order No. DA8215749

OPPENHEIMER, VIRGINIA LAYTON, ED.D. *Columbia University Teachers College*, 1982. 85pp. Sponsor: Anne Selley McKillop

The study assumed that phrasing provides information necessary to reading comprehension over and above that which is provided by word knowledge alone, and tested a method of organizing text into phrases which improved the comprehension of poor middle school readers without improving the accuracy or automaticity of their word identification skills.

The study asked the following questions: (1) Will prearranging text into phrases which are visually separated from each other improve reading comprehension for good, average, or poor readers? (2) If so, will the amount of improvement be different for easy than for difficult reading material? (3) Will the improvement for poor readers be greater for those with more accurate and/or automatic decoding skills?

Comprehension subtests of the Gates-MacGinitie reading tests were presented to middle school students ranging in reading skill level from the second to the eighth stanine, in both regular and visually phrased versions, in which phrases were separated by wider linear spaces than single words. Comprehension scores on the regular and visually phrased versions were compared for each student. Word recognition times and accuracy scores were also collected for a series of easy and hard words, as well as for a graded word list.

A correlation coefficient of −.45 was computed between Gain scores (difference in number-correct between Phrased and Unphrased versions) and reading comprehension scores. The relationship was the same for easy or difficult reading material.

Analyses of variance of Gain scores by reading comprehension group showed that poor readers alone were helped by visual phrasing. Good readers, on the other hand, were marginally impeded in their comprehension of more difficult reading material. It was speculated that the unfamiliar visual presentation might have disrupted their otherwise smooth syntactic processing.

Correlation coefficients, computed between reading level and Gain score and degree of automaticity and Gain score, showed little relationship. Apparently, improvement in reading with visual phrasing is not greater for more accurate or more automatic decoders.

The study repeated the findings of Perfetti that decoding time is inversely related to reading comprehension. However, the results did not support the strong form of the decoding sufficiency hypothesis.

EFFECTS OF VARYING PROTOTYPICALITY AND ARGUMENT-REPETITION ON SENTENCE COMPREHENSION BY HIGH- AND LOW-ABILITY READERS

Order No. DA8223588

PIERCE ANTONACCI, PATRICIA ANNE JOAN, PH.D. *Fordham University*, 1982. 315pp. Mentor: Lillian C. R. Restaino-Baumann

The purpose of the study was to determine the effects of varying word concepts in sentences on the comprehension of high- and low-ability readers. Word concepts were varied on two factors: (a) degree of category membership and (b) number of repetitions of arguments.

Category membership was operationalized by administering the *Prototypicality Rating Scale* (PRS) to a group of students similar to the subjects in the investigation. Their ratings yielded data which determined the prototype and nonprototype concepts from each semantic category.

A total of 40 target sentences was constructed from the word concepts that varied in degree of prototypicality. There were four sentence types: (a) prototype with two repetitions of arguments, (b) prototype with no repetitions of arguments, (c) nonprototype with two repetitions of arguments, and (d) nonprototype with no repetitions of arguments. The sentences were constructed to contain a text base of five propositions and three different arguments.

One hundred twenty sixth-grade students from a middle school in Yonkers, New York, were randomly selected and classified as high- or low-ability readers based upon their comprehension scores on the *Metropolitan Achievement Test*.

The target sentences were presented one at a time to the subjects who were tested for immediate free recall. A three-way analysis of variance with repeated measures on prototypicality and argument-repetition was performed on the number of propositions recalled from the target sentences.

The major findings indicated that recall was better for: (a) high-ability readers than for low-ability readers, (b) sentences containing prototype word concepts than for those with nonprototype word concepts, and (c) sentences with two repetitions of arguments than for those with no repetitions. Further, comprehension of low-ability readers was facilitated to a greater degree than comprehension of high-ability readers by both types of sentences, those containing prototype word concepts and two repetitions of arguments.

A major conclusion suggested by the results of the current investigation is that text containing prototype word concepts and repetitions of arguments facilitates reading comprehension. Further, such text benefits the comprehension processes of the unskilled reader to a greater degree than the skilled reader.

EFFECTS OF COGNITIVE STYLES ON INFERENTIAL READING COMPREHENSION

Order No. DA8223266

PITTS, MURRAY MAUGHT, PH.D. *University of New Orleans*, 1982. 180pp.

The study investigated the relationships among three cognitive styles and inferential reading comprehension abilities under conditions of varying schema availability. The predictor variables were grade level, and four assessments of three cognitive styles. The criterion variables were scores on two sets of inferential comprehension questions, referring either to passages about familiar events and places or to passages about unfamiliar events and places. It was hypothesized that style influences inferencing ability and that somewhat different cognitive processes underlie inferential comprehension of passages involving varying schema availability. Hypotheses were tested at the .05 level of statistical significance.

Subjects were fourth-, fifth-, and sixth-grade students from two metropolitan schools in New Orleans. Because IQ is an admission standard at both schools the subjects were relatively homogeneous with respect to intelligence. Testing was conducted over a two day period for about 60 minutes each day.

The data analyses included factor analysis of style scores, latent trait analysis of reading comprehension scores, and stepwise canonical correlation analysis of multivariate relationships between the criterion and the predictor variable sets. The results suggest that although cognitive processes involved in comprehension of both schema-available and schema-unavailable passages are related, the processes are also somewhat different. Since the canonical correlation ($Rc = .62$) among the two variable sets is statistically significant, and is apparently educationally significant as well, the results also suggest that cognitive styles mediate some comprehension processes. The results suggest that instructional strategies, including instruction of comprehension monitoring skills, might be used to improve children's comprehension abilities.

SECOND, THIRD, AND FOURTH GRADERS' COMPREHENSION OF SPOKEN AND WRITTEN COMPLEX SENTENCES

Order No. DA8215962

RICHGELS, DONALD JAMES, PH.D. *The University of Wisconsin - Madison*, 1982. 249pp. Supervisor: Professor Wayne Otto

Traditionally, investigations of the relationship between oral language and written language have sought to identify the contribution of oral language ability to acquisition of reading ability. This study investigated the contribution of emerging literacy (ability to read) to the acquisition of language ability, specifically to the acquisition of complex language structures not yet mastered by most school aged children. The conclusion is that developing ability to understand difficult syntactic structures is a consequence of literacy. The implication is that the relationship between written language and children's language acquisition ought to be made explicit in the teaching of reading and language arts.

Thirty-two second graders, 32 third graders, and 32 fourth graders were individually tested for comprehension of passive cleft and passive pseudocleft sentences with relative clauses--markers and auxiliaries, using a picture selection test in which the input sentence was no longer available to either listeners or readers at the time of their selecting a picture. Sentences were either spoken or written and either easy or difficult. Those whose noun-verb-noun relations are according to expectancy (lexical items) were judged to be easy, and those whose NVN relations are contrary to expectancy (syntactic items) were judged to be difficult.

Planned comparisons of means on written lexical, written syntactic, oral lexical, and oral syntactic items indicated support for a predicted interaction between grade and mode of presentation of syntactic items, an effect of sentence type (whether lexical or syntactic, and an interaction between grade and sentence type of written sentences. While no support was found for a predicted effect of grade in comprehension of syntactic items, Scheffe comparisons indicated an effect of grade in comprehension of *written* syntactic items.

Subjects' preferred mode of presentation of difficult items changed between second and fourth grades in the direction of a preference for written sentences, and there was no match in performance on easy written items for improvement in comprehension of difficult written items. This suggests that the important difference in reading performance between second and fourth grades is in ability to process syntax and that literacy contributes to that ability.

A PSYCHOLINGUISTIC COMPARISON OF SECOND GRADE GOOD READERS AND FOURTH GRADE GOOD AND POOR READERS ON THEIR ORAL READING MISCUES AND STANDARD AND PHONEME CLOZE RESPONSES

Order No. DA8216888

SHEARER, ARLEEN PASETTI, PH.D. *University of South Florida*, 1982. 200pp. Major Professor: Donald D. Neville

The purpose of this study was to examine linguistic cue usage by good and poor readers. A secondary purpose was to compare the standard and phoneme cloze procedures to oral miscue analysis.

Subjects were second grade good readers and fourth grade good and poor readers. The researcher identified subjects based on test scores and a teacher rating and randomly assigned the subjects to one of three test forms.

Test passages were used intact, for the oral analysis, and as cloze procedures with 50 deletions using a fifth-word pattern. The phoneme cloze included the first phoneme of the deleted word.

The researcher scored all cloze responses and oral reading miscues according to their semantic and syntactic appropriateness. Oral reading miscues were also analyzed on their graphic similarity to the text word.

The linguistic analysis conducted on the errors resulted in six categories; synonyms, semantic and syntactic, semantic and not syntactic, syntactic, nonsense, and omission. Each subject's responses were categorized into one of the categories and percentage error scores were determined.

Two linguistic categories revealed qualitative differences between good and poor readers. The syntactic and nonsense errors were significantly different for the two fourth grade reading groups. The good readers showed a higher mean score on syntactically appropriate errors and a lower mean score on the nonsense errors than the poor readers in the fourth grade. A discriminant analysis with all three groups showed the discriminant function using syntactic and nonsense errors as the dimensions to discriminate better than chance for all three test forms.

Quantitative differences between groups were different depending on the test form used. The cloze test showed no quantitative differences between fourth grade good and poor readers, but the oral test did have significantly different scores for the two groups.

The major implications for future research and practice include the use of the syntactic and nonsense variables as predictors of reading failure, the use of the cloze as a diagnostic tool for context clues, and the use of the phoneme cloze over the standard cloze to determine reading level.

DIFFERENTIAL WORD KNOWLEDGE AND READING COMPREHENSION

Order No. DA8223232

STAHL, STEVEN ALAN, ED.D. *Harvard University*, 1982. 179pp.

The relationship between word knowledge and reading comprehension is well established. This paper explores one hypothesis regarding the nature of that relationship: that greater knowledge of word meanings directly enables better text comprehension.

A review of the literature suggests that we have two types of knowledge about words we know, "definitional" or knowledge of how a word relates to other words, and "contextual" or knowledge of how a concept is realized in context. It was further suggested that vocabulary instruction which included both definitional and contextual information would be more effective than instruction which included only definitional information, on both reading comprehension and vocabulary posttests.

To test these hypotheses, 28 average fifth grade readers were taught three lists of 10 words each by three methods, a definitional, a mixed, and a control treatment. Four posttest measures were used to measure comprehension and vocabulary.

On the comprehension measures, there was evidence that both vocabulary training treatments improved reading comprehension skill, but the two training treatments did not differ significantly from each other. On the vocabulary measures, the differences between the two training treatments were similarly not significant.

The finding that vocabulary instruction did appear to improve reading comprehension skill was contrasted to earlier studies which did not find such an effect. It was suggested that the measures used in this study may have been more sensitive to the effects of vocabulary training than those used earlier.

Two possible explanations were proposed for the similarity in the effects of the two vocabulary training treatments. First, analysis of the actual instruction given in the classrooms suggested that the students in the definitional treatment may have either got a sentence context from the dictionary or generated it themselves in class discussion. Thus, the content of each lesson did not differ as much in practice as intended. Second, it was suggested that both treatments required similar types of cognitive processing by the students, possibly also leading to similar results.

RELATIONSHIPS OF SYNTACTIC ATTAINMENT, READING ACHIEVEMENT, AND INTELLIGENCE OF FOURTH GRADE CHILDREN

Order No. DA8213190

STOCKMAL, HELEN CHRIST, PH.D. *University of Pittsburgh*, 1981. 273pp.

Three aspects of language interrelationships were investigated: degree of relationships among selected variables; patterns of relationships among syntactic competencies; and the role intelligence has in grouping syntactic patterns.

The sample of 143 fourth grade students came from a suburban school district in southwestern Pennsylvania. Raw scores on the following tests measured language variables: written *Sentence Construction Test* (SCT), Level C, a diagnostic measure of 19 subskills developed at the University of Pittsburgh by Sartain et al.; oral SCT, Level C, a corresponding instrument developed by the investigator; *Comprehensive Tests of Basic Skills*, Level 1 reading subtests of vocabulary, comprehension, and total reading; and the *Slosson Intelligence Test*. Test reliability of the written SCT was .90, determined by Kuder-Richardson Formula 20 which also revealed a reliability of .76 for the oral SCT.

Correlations among all six general language-related measures (.61 - .66 with written syntax and .49 - .59 with oral syntax) were positive, significant at .001. Several correlations among specific subskills in both written and oral syntax, ranging from low to moderate, were significant at .05. Four language syntax factors emerged from factor analyses on both written and oral syntax--use of embeddedness, pattern words, basic sentence patterns, and syntactic operation of addition. Additional factor analyses incorporating reading and scores showed that intelligence did not load significantly on the factors. Further research is needed to verify the patterns of relationships and the tenuous role intelligence demonstrated in the establishment of syntactic abilities.

Correlational findings were compared among three SCT levels (Level C and Levels B and E from previous studies conducted by Harris, 1974, and Kuntz, 1975). A similar degree of correlational magnitude was observed.

EMPIRICAL INVESTIGATION OF RELATIONS AMONG SELECTED READING SUBSKILLS

Order No. DA8216468

TREZISE, JOHN MACK, JR., PH.D. *Arizona State University*, 1982. 87pp.

The purpose of this research was to replicate and validate part of a hierarchy of beginning-reading subskills. Using a cross-sectional sampling design, 32 children from each of the kindergarten, first, and second grades were given the Kennedy Institute Phonics Test-Revised (KIPT-Revised). Data from this testing were ordered by level of difficulty and by order analysis. On a second administration of the KIPT-Revised, two new groups were formed. One group consisted of 20 first graders who had mastered Letter Naming but not the Initial Letter-Sound Recognition or Letter-Sound Production subtests. The other group consisted of 20 first graders who had mastered Initial Letter-Sound Recognition but not the Letter Naming or Letter-Sound Production subtests. Equal numbers of students from each group were then randomly assigned to either a training or control group. The two training groups were instructed in Initial Letter-Sound Recognition or Letter Naming. Training was discontinued after 100% mastery or 14 days of training, and all subjects were posttested with the KIPT-Revised. The main analysis of these data was a 4 (treatment) by 2 (gender) by 3 (subtest) fixed effects MANOVA with repeated measures on the test variable. The effects of students mastering both Initial Letter-Sound Recognition and Letter Naming transferred to Letter-Sound Production and to other subtests in the hierarchy. The effects of students mastering either Initial Letter-Sound Recognition or Letter Naming alone did not transfer.

THE EFFECT OF SACCADIC FIXATIONS ON WORD RECOGNITION AND READING COMPREHENSION

Order No. DA8225122

WOLFSON, FRED HARVEY, ED.D. *Hofstra University*, 1982. 133pp.

The purpose of this investigation was to determine the effects of saccadic fixations on recognition of words in isolation and words in continuous discourse. It was also determined how these saccades effected reading comprehension.

The specific problems investigated were: Those children whose accuracy of saccadic fixation places them in the top forty percent of the sample will show significantly higher recognition of words presented in isolation or presented in continuous discourse, significantly higher total comprehension following silent reading, and significantly higher total comprehension following oral reading, than the bottom forty percent of the sample. Those children whose accuracy of saccades display low scatter or variability will show significantly higher recognition of words in isolation or words in continuous discourse, significantly higher total comprehension following silent reading, and significantly higher total comprehension following oral reading than those whose display high scatter or variability in their accuracy of saccades.

The subjects were ninety-six, randomly selected students, approximately ten years of age, in grades four or five.

To accomplish the task of identifying the effects of saccadic fixations upon word recognition and reading comprehension, each child was examined on a Gulf and Western Eye Trac Instrument. A photoelectric tracking of saccadic movements under non-reading conditions was recorded. Children were separated into two groups, top and bottom forty percent (accurate saccades) and variability of saccades. Two tests of word recognition, words in isolation, and words in a continuous discourse, were administered. The groups were also administered a test of reading comprehension. The results of all testing in this statistical design were analyzed by the use of analysis of variance.

In summary, the results of the investigation have indicated that there was no significant relationship beween accuracy of saccadic movement, variability of saccades, and reading. However, it did determine that those children whose saccadic eye movements were consistent or stable, read significantly better.

A MULTIVARIATE ANALYSIS OF FIRST GRADERS' PRINT AWARENESS AS RELATED TO READING ACHIEVEMENT, INTELLIGENCE AND GENDER

Order No. DA8225520

YADEN, DAVID BYRON, JR., PH.D. *The University of Oklahoma*, 1982. 112pp. Major Professor: Richard P. Williams

The purpose of the investigation was in part to replicate with a larger sample size previous findings that children demonstrate certain confusions about printed conventions and that above average readers perform better on measures attempting to assess knowledge of printed conventions. The study in addition set out to measure the contribution of intelligence to both print awareness and reading achievement and to test for the presence of certain hypothesized effect sizes to more precisely define the relationship between print awareness, reading ability and intelligence.

Subjects for the study were 118 all white first grade students, 62 female and 56 male, from a predominantly middle class, metropolitan school district. Students were individually interviewed with the *Concepts About Print Test* during April. Other measures included were the *Otis-Lennon School Ability Test* and the *Stanford Achievement Test*. Statistical analyses performed were a multiple regression of print awareness on measures of reading ability, intelligence and gender, partial correlations between reading, intelligence and print awareness, a one-way MANOVA comparing above and below average readers on previously identified factors in the *Concepts About Print Test* (CAPT) and intelligence and, finally, a canonical correlation between aspects of print awareness and measures of reading ability.

In general, the study supported the findings of previous research that some beginning readers' concepts of letters, words and marks of punctuation are not stabilized even after one year of reading instruction. Significant differences were found between types of readers on the measure of intelligence and on items of the CAPT representing directional habits and pertaining to the identification of incorrect word and letter sequences and punctuation. No sex differences were found on any variables measured in the study.

Not confirmed were the hypothesized individual effects of reading ability and intelligence on print awareness scores. With intelligence controlled, individual measures of reading accounted for less than 20% of the variance of print awareness. With reading controlled, intelligence accounted for less than 10% of the variance. In combination, however, measures of reading achievement, intelligence and gender accounted for approximately 40% of the variance in print awareness as measured by the CAPT.

THE EFFECT ON FREE RECALL OF METAPHORIC PROCESSING IN A STRUCTURED CONTEXT

Order No. DA8225247

YARBROUGH, DONALD, PH.D. *University of Georgia*, 1982. 121pp. Director: Dr. Ellen Gagne

The purpose of this study was to investigate the processing of metaphors in technical text and to determine if metaphoric processing has an effect on the learning of technical information.

Ninety-six college students in undergraduate psychology classes participated in the experiment. The average age of the participants was nineteen.

Participants received one of eight versions of a five paragraph passage on energy with the instructions to read the paragraph at their normal reading speed, to put the passage away after they had finished reading, and to write down all that they could remember from the passage. Only the recall of a specific target paragraph was scored. The eight versions of the passage were orthogonal combinations of three experimental factors: (1) whether the target paragraph contained metaphors, (2) whether the other four paragraphs in the passage (the context) contained metaphors, and (3) whether the target paragraph was important or unimportant in the informational structure (hierarchy) of the passage.

More information was remembered when the context did not contain metaphors ($p < .01$). Participants also remembered more information when the target paragraph was more important in the hierarchy of the passage ($p < .001$). In the literal context condition, only those participants who read the literal target paragraph recalled more when the target paragraph was more important in the passage structure. Participants who read the metaphoric target paragraph recalled similar numbers of metaphors regardless of whether the target paragraph was more or less important in the passage hierarchy. Participants who read metaphoric target paragraphs often recalled the information in paraphrase form and sometimes recalled the metaphor without being able to integrate it into the rest of the paragraph.

Data from this study suggest that metaphors are processed differently from literal language. A two-step process of solving the metaphor in its context and storing the information in a nonmetaphoric representation equivalent to the representation of a corresponding paraphrase is consistent with the findings of this study. Furthermore these data suggest that the educational value of including nonessential metaphors in technical text is influenced by the importance in the passage hierarchy of the information presented metaphorically.

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